TITLE V OPERATING PERMIT STATEMENT OF BASIS

Facility Name: General Dynamics NASSCO

Title V Permit No.: APCD2003-PTO-960992

Permit Application Nos.: APCD2015-APP-004079 (renewal)

Site ID: APCD1976-SITE-00145

Equipment Address: 2798 E. Harbor Drive San Diego, CA 92113

Facility Contact: Sara Giobbi **Contact Phone:** (619) 544-8764

Permit Engineer: Doug Erwin **Date Completed:** 2/8/2016

1.0 Purpose/Introduction

This statement of basis describes the renewal Title V permit for NASSCO.

2.0 Facility Description

NASSCO designs and builds ships. The facility consists of abrasive blasting operations, marine coating, metal parts coating, wood products coating, plasma cutters, and IC engines.

The primary air quality focus for this facility is the emissions of criteria pollutants and hazardous air pollutants (HAPs) from coating operations. For this Title V review, air quality considerations and regulatory applicability are summarized with frequent reference to permit content. Considerations specific to Title V, notably monitoring, record keeping and reporting, are also included.

3.0 <u>Title V Applicability</u>

The notable pollutants emitted at NASSCO are volatile organic compounds (VOC), hazardous air pollutants (HAP), and nitrogen oxides (NOx). Section II. C. 3. of the title V permit includes a facility-wide limit on NOx emissions of <50 tons/year, which establishes the potential to emit (PTE) for NOx. Estimated PTE for VOCs, the bulk of

which originate from coating operations, are 29.4 tons/year. Based on these PTEs, and the fact that there are only miniscule emissions of the other criteria pollutants, NASSCO is (as it has been historically) below major source thresholds for criteria pollutants. However, PTEs for HAPs are understood to be above the major source threshold of 10 tons/year of any individual HAP and/or 25 tons/year of any combination of HAPs.

Given the above, NASSCO is and has been historically (since at least as early as 2003 when its initial title V permit was issued) subject to title V permitting because it is a major source of HAP.

4.0 Applicable Requirements

The following tables list the rules that apply at NASSCO, both on a facility-wide scale and specific to individual emission units.

Facility-wide Requirements

Regulation	Rule Citation	Title	
SDCAPCD Reg. II	10	Permits Required	
SDCAPCD Reg. II	19 Provision of Sampling & Testing Facilities		
SDCAPCD Reg. II	19.3	19.3 Emission Information	
SDCAPCD Reg. II	21	Permit Conditions	
SDCAPCD Reg. IV	60	Circumvention	
SDCAPCD Reg. V	98	Breakdown Conditions: Emergency Variance	
SDCAPCD Reg. VI	101	Burning Control	
SDCAPCD Reg. VI	131	Stationary Source Curtailment Plan	
SDCAPCD Reg. VI	132	Traffic Abatement Plan	

Emission Unit Specific Requirements

Regulation	Rule Citation	Title	
SDCAPCD Reg. II	10(a)	Permits Required – (a) Authority to Construct	
SDCAPCD Reg. II	19	Provision of Sampling & Testing Facilities	
SDCAPCD Reg. II	19.3	Emission Information	
SDCAPCD Reg. II	20.3	New Source Review	
SDCAPCD Reg. II	21	Permit Conditions	
SDCAPCD Reg. IV	50	Visible Emissions	
SDCAPCD Reg. IV	51	Nuisance	
SDCAPCD Reg. IV	52	Particulate Matter	
SDCAPCD Reg. IV	67.0	Architectural Coatings	
SDCAPCD Reg. IV	67.3	Metal Parts and Products Coating Operations	
SDCAPCD Reg. IV	67.17	Storage of Materials Containing VOC	
SDCAPCD Reg. IV	67.18	Marine Coatings	
SDCAPCD Reg. IV	67.20.1	Motor Vehicles and Mobile Equipment	
		Refinishing Operations	

SDCAPCD Reg. IV	67.21	Adhesive Material Application Operations	
SDCAPCD Reg. IV	69.4	Stationary Reciprocating Internal Combustion	
		Engines - RACT	
SDCAPCD Reg. IV	69.4.1	Stationary Reciprocating Internal Combustion	
		Engines - BARCT	
SDCAPCD Reg. IV	71	Abrasive Blasting	
SDCAPCD Reg. XII	1200	Toxic Air Contaminants – New Source Review	
SDCAPCD Reg. II	20.3	NSR – major Stationary Source and PSD	
		Stationary Source (Version 11/4/98)(not in SIP)	
NESHAP	40 CFR Part 63	Shipbuilding and Ship Repair (Surface Coating)	
	subpart II		
NESHAP	40 CFR Part 63	Reciprocating Internal Combustion Engines	
	subpart ZZZZ	(RICE)	

The requirements from each listed rule are incorporated into the District and Title V permits accordingly. In some cases, a requirement may be "subsumed" by another, more stringent requirement.

Additional Consideration of Federal Requirements

NESHAP Subpart II applicability

The provisions of this subpart apply to shipbuilding and ship repair operations at any facility that is a major source of HAPs. Permit conditions for coating operations are included to ensure compliance with subpart II.

NESHAP Subpart ZZZZ applicability

This subpart applies to the emergency engine under District PTO#000550, and permit conditions are included to ensure compliance. The balance of IC engines onsite are exempt for subpart ZZZZ because they are non-road engines as defined in 40 CFR 1068(1)(iii).

NESHAP Subpart HHHHHH applicability

The provisions of this subpart apply to area sources of HAPs. NASSCO is a *major source* of HAPs. Therefore, this subpart *does not apply* to NASSCO's automotive refinishing station, APCD2004-PTO-861053.

NESHAP Subpart MMMM applicability

If a surface coating operation accounts for 90 percent or more of the surface coating activity at the facility (that is, the predominant activity), then compliance with the emission limitations of the predominant activity for all surface coating operations constitutes compliance with this and other applicable surface coating NESHAP. The predominant activity of this facility under section 63.3881(e)(2)(i) is the application of marine coating, which falls under the requirements of Subpart II – NESHAPS for

Shipbuilding and Ship Repair (Surface Coating), pursuant to section 63.3881(c)(12). Therefore, since subpart II applies, subpart MMMM *does not apply*.

5.0 <u>Monitoring, record-keeping and reporting (MRR)</u>

Plant-wide MRR Pursuant Title V

Section I. C. of the permit contains general MRR that extend to the entire facility and are based on District Regulation XIV and 40 CFR part 70. These requirements include records retention, semiannual compliance reporting, annual compliance certification, and deviation reporting.

Coating Operations

All permits covering coating operations include conditions comprising MRR, which ensure compliance with applicable rules. These include measurement and documenting of HVLP gun air cap pressure, temperature monitoring and periodic testing for thermal oxidizers, and tracking and documentation of coating materials composition and usage pursuant 40 CFR 63 subpart II and/or other regulations such as those under NSR.

Abrasive Blasting Operations

The chief monitoring requirements for blasting systems at NASSCO are a specified pressure drop range (dP) as measured across the filter media, and record-keeping for the same. These actions are included as permit conditions.

Engines

All permits covering engines at NASSCO include conditions requiring the following:

- Only the use of California certified diesel fuel (all of these engines are diesel) is allowed, and must maintain documentation certifying this
- Maintenance procedures must be retained
- A fuel meter must be installed and operated to log fuel usage and demonstrate compliance with applicable limits
- A log must be maintained to document fuel usage

Plasma Cutting

A specified pressure drop (dP) across the filter control system is required to be maintained by permit condition. Periodic maintenance of plasma cutting equipment and control system leak checks are also required by permit condition. Additionally, these maintenance endeavors are required to be documented (dates of both operation and maintenance, nature of any maintenance, filter system dP readings, et al) as given by permit condition.

6.0 <u>Compliance Assurance Monitoring (CAM)</u>

A review of emission units (EUs) at NASSCO was conducted at the last renewal to determine CAM applicability under 40 CFR Part 64. Two EUs were determined to be subject to CAM (PTOs 802 & 803, blast cells) and permit conditions were added to ensure compliance. These conditions remain in the above permits to ensure compliance with CAM.

Since the last title V renewal, a limited number of changes have occurred that require additional (current) consideration of CAM applicability. Those EUs that have been considered are summarized in the following table. Each of the three (3) permitted EUs that have been determined to be subject to CAM contain conditions the ensure compliance with CAM and references to Part 64.

Permit or App#	EU Type	Does CAM Apply?	Reason(s) for CAM Determination
000399	Plasma cutting	No	No PM10 limit is established; Precontrol emissions are below the major source threshold
000550	Emergency engine	No	No add-on control exists
001615	Blast unit	Yes	All criteria under 40 CFR §64.2(a) are affirmative; no exemptions apply
001617	Blast unit	Yes	All criteria under 40 CFR §64.2(a) are affirmative; no exemptions apply
001908	Prime engine	No	No add-on control exists
002467	LNG Bunkering	No	Pre-VOC control emissions below major source threshold
App3908	Thermal oxidizer	No	This is control equipment with no additional controls at the exhaust
App4024	Marine Coating	Yes	All criteria under 40 CFR §64.2(a) are affirmative; no exemptions apply
App4025	Blast unit	No	Pre-control PM emissions < 100 tons/yr (major source threshold)

7.0 Permit Shield

In accordance with District Rule 1410(p) and 40 CFR Part 70.6(f), a permit can include a provision precluding the permittee from enforcement action for certain requirements that either do not apply or that are superseded by another requirement to which the permittee is subject, as stated in the permit. A permit shield, if granted, is limited as given by the aforementioned regulations.

A permit shield was requested by the applicant and is provided at Section II. D. of the permit. The requirements listed in the permit shield, were evaluated against the provisions of the aforementioned regulations. Each listed requirement in the permit shield was determined to be acceptable because it either does not apply or it is superseded in stringency by another requirement given in the permit.

8.0 Conclusions / Recommendations

The source is expected to comply with all applicable requirements including those cited in the current District permits as well as those under District Rule 1401 and 40 CFR Part 70. Therefore, the recommendation of this report is for the subject renewal NASSCO's Title V permit to be issued following public notice and EPA review.